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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,112	06/16/2000	Henry Haverinen	944-001-031	1596

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EXAMINER

TRAN, PHUC H

ART UNIT	PAPER NUMBER
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2668

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/595,112

Applicant(s)

HAVERINEN ET AL.

Examiner

PHUC H. TRAN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9 and 12-26 is/are rejected.
- 7) ☒ Claim(s) 7,8,10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9, and 12-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wan (U.S. Patent No. 6680920) in view of Hughes et al. (U.S. Patent No. 6553020 B1).

- With respect to claims 1, 5, 16, 18, & 22-23, Wan teaches a mobile Internet protocol regional paging network having a-visited-domain mobility agent (710 in Fig. 7) for handling a regional registration of a mobile node (MS in Fig. 1) visiting a paging area (e.g. Fig. 1),

the mobile node having an idle mode module for periodically providing an idle mode request to the visited-domain mobility agent containing information that the mobile node is entering an idle mode (col. 6, lines 56-67) so as to deactivate one or more components for energy saving purposes and reduce active communication with the mobile internet protocol regional paging network (col. 7, lines 13-19),

Wan fails to teach the negotiating a time slot based paging scheme. Hughes teaches the negotiating between nodes to agree on a time slot for synchronization (col. 17, lines 26-28). The negotiating method of timeslot can be implemented into Wan's invention at the mobile switching center (col. 23, lines 47-50) for which timeslot is

Art Unit: 2616

assigned to the mobile station. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the negotiating method for synchronizing between mobiles in wireless communications.

- With respect to claim 2, Wan also teaches characterized in that the time slot based paging scheme includes the exchange of information about time slots used for paging area advertisements by the visited-domain mobility agent, a message for the mobile node to deduce its current paging area, or a combination thereof (e.g. the short paging channel for the mobile to shut down at giving time slot Fig. 14, col. 2, lines 45-55).

- With respect to claims 3, 20, & 25, Wan teaches characterized in that time instant are expressed in relation to a current time of day, if the mobile node and the visited-domain agent have accurate and synchronized time of day clocks (Fig. 9 the mobile station synchronizes with the MSC).

- With respect to claims 4, 21 and 25, Wan also teaches characterized in that time instants are expressed in relation to some time instant that the mobile node and the visited-domain agent both know (e.g. the time that mobile and agent are synchronizing with each other), including time instants when periodic paging area advertisements are broadcast (col. 1, lines 36-38).

- With respect to claim 6, Wan teaches characterized in that one of the parameters is a paging slot interval parameter for time slot based paging support (col. 25, lines 62-65).

- With respect to claims 9, & 17, Wan discloses characterized in that the visited-domain mobility agent has a visitor list module that responds to the idle mode request,

Art Unit: 2616

modifies its visitor list to include the mobile node and maintains a paging state for the mobile node as an idle mode (706 in Fig. 7, col. 2, lines 18-25).

- With respect to claims 12-15, Wan also discloses characterized in that the visited-domain mobility agent responds to a regional registration request from the mobile node and maintains the paging state for the mobile node as an active mode (block 1006-1012 in Fig. 10).

- With respect to claims 19, & 24, Wan teaches characterized in that the time slot paging module negotiates a time slot based paging scheme with the visited-domain mobility agent and agrees on time slots used for paging area advertisements and paging within the paging area (col. 1, lines 52-55; col. 9, lines 54-57).

Allowable Subject Matter

3. Claims 7-8, and 10-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 12/02/05 have been fully considered but they are not persuasive.

In response to applicant's argument that Hughes tries to solve a very different problem than Wan of providing communication links. Examiner respectfully disagrees. In both, Wan and Hughes are in wireless communication system and they both uses TDM for communication. Although, Hughes does not teach power saving in the wireless, but

Art Unit: 2616

Hughes teaches the timeslot negotiation to communicate between devices, which allows the devices to agree with each other on the timeslot number that they can transmit.

Therefore, Examiner implements the method of timeslot agreement of Hughes into Wan (who also uses timeslot in communication) to improve the communication between a mobile and base station.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO S. SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

Pt
2/15/06

A handwritten signature in black ink, appearing to read 'Dang Ton' with a stylized flourish at the end.

DANG TON
PRIMARY EXAMINER